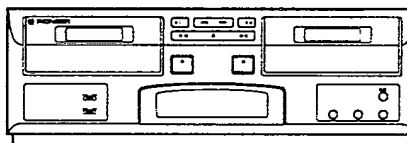


Service Manual

PIONEER®
The Art of Entertainment



ORDER NO.
RRV1036

STEREO DOUBLE CASSETTE TAPE DECK

CT-J320WR

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	Remarks
	CT-J320WR		
AEM	○	AC power supplied from power transformer's secondary of other system component	
AB	○		
ADL	○		

● This product is a system(s) component.

This product does not function properly when independent; to avoid malfunctions, be sure to connect it to the prescribed system component(s), otherwise damage may result.

This product's instructions are contained within the instruction manual of the related system component(s).

The manual is packed with those component(s).

This product's accessories etc. are packed with its related component(s).

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CHAPTER 2

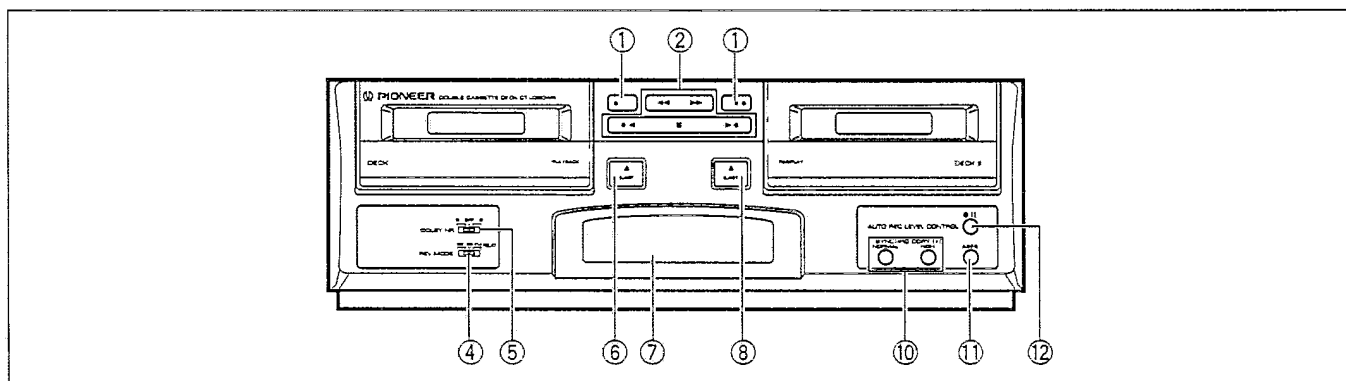
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PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
PIONEER ELECTRONICS SERVICE INC. P.O. Box 1760, Long Beach, California 90801 U.S.A.
PIONEER ELECTRONICS OF CANADA, INC. 300 Allstate Parkway Markham, Ontario L3R 0P2 Canada
PIONEER ELECTRONIC [EUROPE] N.V. Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS AUSTRALIA PTY. LTD. 178-184 Boundary Road, Braeside, Victoria 3195, Australia TEL: [03] 580-9911
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O - SSN JAN. 1994 Printed in Japan

CHAPTER 1

1.1 PANEL FACILITIES



① Deck I/II selector button/indicator

Use to select the deck to use (I or II). The indicator lights to show the deck which has been selected.

② Deck I/II operation buttons

- ▶ (play): For playing back a tape in the forward mode.
- ◀ (play): For playing back a tape in the reverse mode.
- (stop): For stopping the tape.
- ▶▶ (fast): Fast forward in forward mode, rewind in reverse mode. Music search (MS) starts if this is pressed during playback.
- ◀◀ (fast): Rewind in forward mode, fast forward in reverse mode. Music search (MS) starts if this is pressed during playback.

④ REV (reverse) MODE switch

Use this to select tape travel direction during play and record.

- ⏮: One-sided play and record.
- ⏭: This enables auto reverse recording and auto reverse play. If you start with the tape running in reverse, only reverse play and recording are possible.
- ⏪ (RELAY): This enables auto reverse recording and auto repeat playback. The tape does not reverse if recording starts from the (◀) direction. Select this position for DECK I and II relay play.

⑤ DOLBY* NR switch

Set this switch to B or C for recording with the built-in Dolby Noise Reduction system and for playback of tapes which have been recorded using the Dolby Noise Reduction system. For other tapes, set the DOLBY NR switch to OFF.

NOTE:

When playing back DOLBY NR-encoded tapes, always set this switch to the same position (B-type or C-type) used for recording.

*

- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
- "DOLBY" and the double-D symbol DD are trademarks of Dolby Laboratories Licensing Corporation.

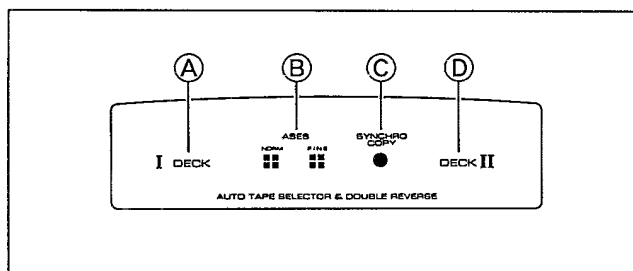
⑥ Deck I EJECT ▲ button

Press to open the cassette door.

NOTE:

This button functions only when the power is turned on.

⑦ Display section



- Ⓐ Lights when deck I is operating.
- Ⓑ Lights during ASES MODE.
- Ⓒ Lights during tape copy.
- Ⓓ Lights when deck II is operating.

⑧ Deck II EJECT ▲ button

⑩ SYNCHRO COPY I ► II buttons

Used for tape copying.

NORMAL: Copying from the deck I tape to the deck II tape at normal speed.

HIGH: Copying at about twice normal tape speed. (Copies can be made in about half the NORMAL time.)

⑪ ASES button

This can be used when recording from a PD-J920M/PD-J520/PD-J320 CD player or CLD-J420 CD CDV LD player. The A.S.E.S. (Auto Synchro Editing System) function automatically edits when recording from a CD to a tape.

⑫ Recording pause button/indicator (● II)

When this button is pressed, the unit enters the recording pause (standby) mode, and the corresponding indicator lights. At the same time, the play button's indicator begins flashing.

1.2 SPECIFICATIONS

Systems.....	4 track, 2-channel stereo
Heads	"Hard Permalloy" playback head x 1
	"Hard Permalloy" recording/playback head x 1
	"Ferrite" erasing head x 1
Motor	DC servo 2 speed motor x 2
Wow and flutter	±0.19 % (DIN)
	0.09 % (WRMS)
Fast winding Time	Approximately 120 seconds (C-60 tape)
Frequency Response (-20 dB recording):	
TYPE I (Normal)	20 Hz to 16,000 Hz ± 6 dB
TYPE II (HIGH/CrO ₂)	20 Hz to 16,000 Hz ± 6 dB
Signal-to-Noise ratio	
Dolby NR OFF	More than 58 dB
Noise Reduction Effect	
Dolby B type NR ON.....	More than 10 dB (at 5 kHz)
Dolby C type NR ON.....	More than 19 dB (at 5 kHz)
Harmonic distortion.....	No more than 1.0 % (-4 dB: 160 nwb/m)

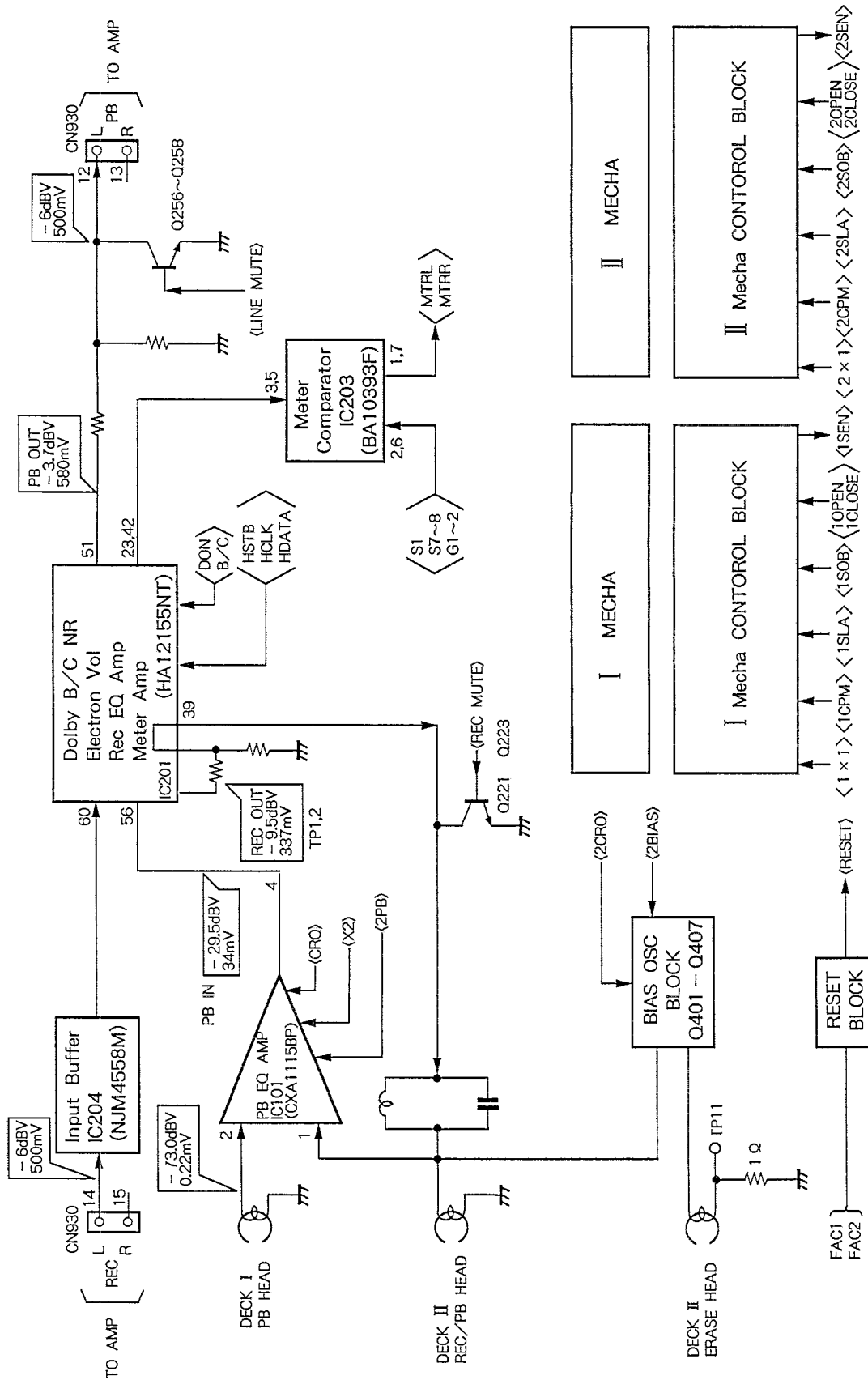
Miscellaneous

Dimensions	360 (W) x 348 (D) x 120.5 (H) mm
Weight (without package)	3.7 kg

NOTE:

Specifications and design subject to possible modifications without notice due to improvements.

1.3 BLOCK DIAGRAM



1.4 ADJUSTMENTS

1. MECHANICAL ADJUSTMENT

This adjustment should be performed in test mode.
• Entering the test mode. – Short circuit JP1 and JP2 inside the main unit and turn the power on.

1. Tape Speed Adjustment and Check						
No.	Deck	Mode	Test tape	Adjusting points	Specifications/Ratings (playback frequency)	Remarks
1	I	Normal speed PLAY	STD-301 (3 kHz)	Play back for 1 minute and press the FF (REW) key. *1		
2		Double speed PLAY		check	6000 Hz ± 600 Hz	
3		Normal speed PLAY		Release the FF (REW) key after checking.		
4	II	Normal speed PLAY		Play back for 1 minute and press the FF (REW) key. *1		
5		Double speed PLAY		VR851	Within ± 10 Hz of step 2 (deck I) check value.	
6		Normal speed PLAY		Release the FF (REW) key after checking.		
7				VR852	3020 Hz ± 5 Hz	
8	I			VR802	Within ± 5 Hz of step 7 (deck II) adjustment value.	

*1: As long as the FF (REW) key is pressed during playback, the unit is set to double speed mode.

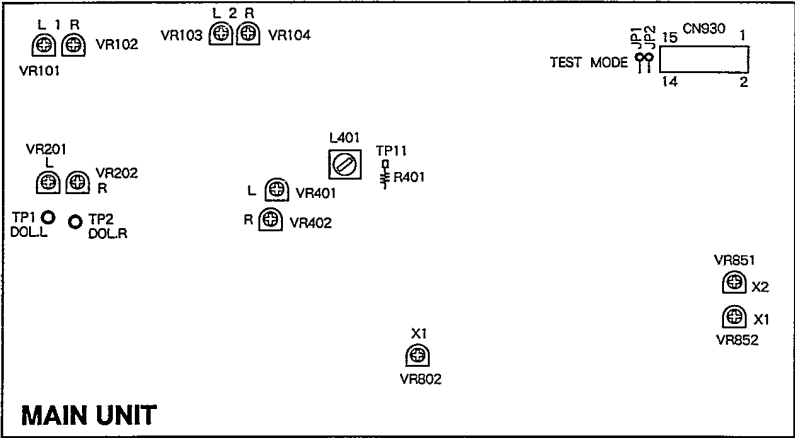
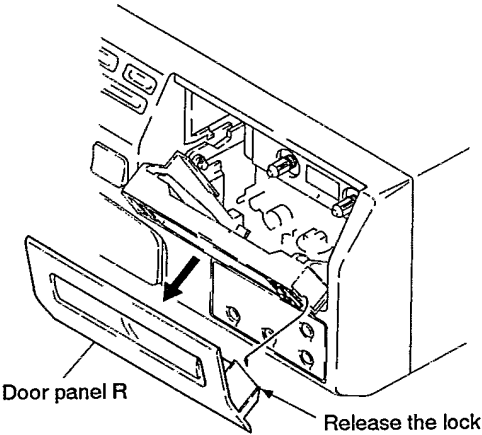


Fig. 1 Adjusting points

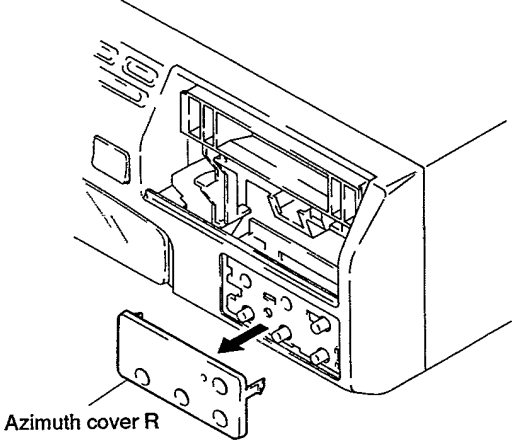
■ Removal of door panels L and R



Note) Remove door panel L (deck I side) in the same way.

Fig. 2 Removal of door panel R (deck II side)

■ Removal of azimuth covers L and R



Note) Remove azimuth cover L (Deck I side) in the same way.

Fig. 3 Removal azimuth cover R (deck II side)

2. ELECTRICAL ADJUSTMENTS

Adjustment Conditions

1. The mechanical adjustments must be completed first.
2. The head must be cleaned and demagnetized.
3. Turn power on allow the deck to warm up for at least a few minutes before commencing any electrical adjustments.
4. The reference signal is 0 dBV=1 Vrms.
5. Connect a 50 k Ω (or between 47k to 52 k Ω) load resistance to the OUTPUT terminals.
6. Unless otherwise specified, the switches listed below are left in the positions indicated.

DOLBY NR : OFF
TAPE SELECTOR : NORM

Test Tapes

STD-331E : Playback adjustments (See Fig. 4)
STD-631 or STD-632 : NORMAL blank tape
STD-621 : CrO₂ blank tape

* As the reference recording level is 250 nwb/m for STD-331E, the recording level will be higher by 4dB for STD-331B (160 nwb/m). When adjusting, pay carefull attention to the type of tape used.

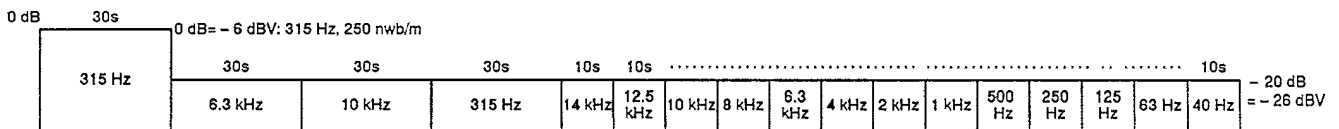
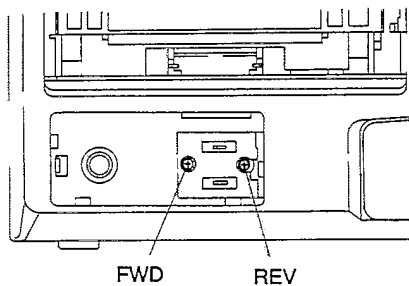


Fig. 4 Constants of the test tape STD-331E

• Deck I side



• Deck II side

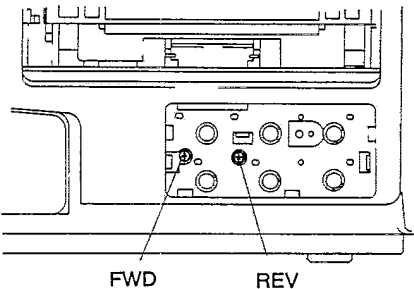


Fig. 5 Head azimuth adjustment

List of Adjustments

Playback sections

1. Head azimuth adjustment.
2. Playback level adjustment.

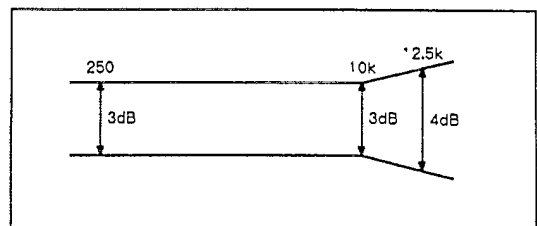
Recording sections

1. Recording bias adjustment.
2. Recording level adjustment.

NOTE: This unit has an automatic tape selection feature.

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"DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

PLAY BACK



RECORDING

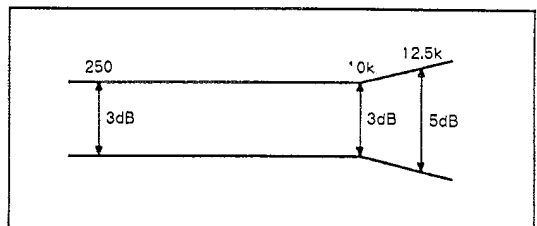


Fig. 6 Frequency response zone

PLAYBACK SECTION

1. Head Azimuth Adjustment

- Turn VR101, VR102 (Deck I) or VR103, VR104 (Deck II) to mechanical center positions.

No.	Mode	Input signal & test tape	Adjustment location	Measuring location	Adjustment value	Remarks
1.	PLAY	Play the 10 kHz/–28 dBV section of STD–331E test tape.	Head azimuth adjustment screw. (See Fig. 5)	CN930–12 pin (Lch) CN930–13 pin (Rch)	Maximum playback signal level.	
2.	STOP	Lock the screw with screw lock after completing adjustment.				

2. Playback Level Adjustment

- This adjustment determines the DOLBY NR level, and must be performed with great care.

No.	Mode	Input signal & test tape	Adjustment location	Measuring location	Adjustment value	Remarks
1.	PLAY	Play the 315 Hz/–6 dBV section of the STD–331E test tape.	Deck I	VR101 (Lch) VR102 (Rch)	TP. 1 (Lch) TP. 2 (Rch)	–9.5 dBV
			Deck II	VR103 (Lch) VR104 (Rch)		

RECORDING SECTION

1. Recording Bias Adjustment

- After the adjustment, caution should be exercised so as not to become under bias by checking the distortion rate.

No.	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	REC/ PAUSE	Apply a 315 Hz/−28 dBV signal to the CN930−14 and 15 pins, load the STD−631 or STD−632 test tape.	—		CN930−12 pin (Lch) CN930−13 pin (Rch)	—	
2.	REC/ PLAY	Record the 315 Hz and 6.3 kHz signals at −28 dBV input level and playback.	Deck II	VR401 (Lch) VR402 (Rch)		Repeatedly record, playback and adjust so that the playback level of 6.3 kHz signal becomes +0.5 dB ± 0.5 dB when compared with the 315 Hz signal.	
3	Check distortion value after adjustment is completed and confirm that there is no underbias.						

2. Recording Level Adjustment

- Turn the DOLBY NR switch is OFF.

No.	Mode	Input signal & test tape	Adjustment location	Measuring location	Adjustment value	Remarks
1.	REC/ PAUSE	Apply a 315 Hz signal to the CN930–14 and 15 pins, load the STD–631 or STD–632 (NORM) test tape.	Applied signal level	TP. 1 (Lch) TP. 2 (Rch)	–13.5 dBV	
2.	REC/ PLAY	Record the 315 Hz/–10 dBV signal and playback.	Deck II	TP. 1 (Lch) TP. 2 (Rch)	VR201 (Lch) VR202 (Rch)	Repeatedly record, playback and adjust so that the playback signal level becomes –13.5 dBV $\pm$ 1.5 dB.
3.	REC/ PLAY	Record the above signal onto the STD–621 (CrO2) test tape, and playback.	Check			–13.5 dBV $\pm$ 1.5 dB

3. TEST MODES

1. OUTLINE OF TEST MODES

There are two types of test modes—test mode 1 which performs special operations and test mode 2 which performs the same MUTE operations as the single deck.

2. Test Mode 1

■ Entering the Test Mode 1

Turn on the power with Pin 48 of the microprocessor (IC902) connected to +5V (Short-circuit the jumper wire.)

■ Operations of Test Mode 1

- The "I, II KEY SEL" will blink during test mode 1. (Displayed during Test mode 1)
- Like for the single deck, LINE MUTE will be open during REC and REC PAUSE.
- The mechanism will operate regardless of whether the tape has been inserted or not.
- ASES will not operate.
- If at tape end, tape end processing will always start within one second.
- After the power is turned on, operation keys will be accepted as soon as initialization completes.
- The following special operations will be carried out.

① Passport operation Check

When ENA/REQ (Pin 23) of the microprocessor is set to "L", SD (Pin 22) will output the reversed voltage level that is opposite to the voltage level ("H" or "L") supplied to SLK (Pin 24).

Table of SD port output

		SCK	
		L	H
ENA/REQ	L	H	L
	H	—	—

② Electronic VR (Incorporated in IC201, HA12155NT) Operation Check

The attenuation amount (ATT) can be selected using the REVERSE MODE SW. It can be changed using the I-FWD PLAY key (VR+) and I-REV PLAY key (VR -) only during REC PAUSE Furthermore, ASES LED will be lit by D - 411.

REV MODE SW	Attenuation Amt (dB)	ASES LED
⏮	-30	NORM LED lights up
⏪	-14 (ALC operations)	LED turns off
⏩	-6	FINE LED lights up

③ Tape Speed Selection

The tape speed will double when the FF or REW key is pressed during PLAY. The FF and REW keys of both mechanisms 1 and 2 can be used to set × 2 speed PLAY. (See Fig. 7)

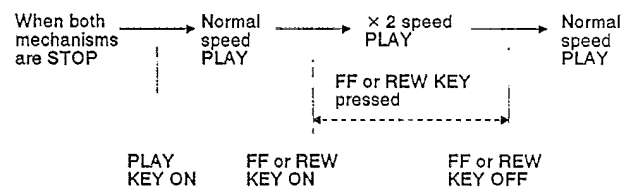


Fig. 7

■ Exiting Test Mode 1

Press the ASES key twice with both mechanisms in the STOP state. Test mode 1 will be ended and normal operations will return. When the key is pressed only once, test mode 2 will be set.

3. Test Mode 2

■ Entering Test Mode 2

Press the ASES key once with both mechanisms in the STOP state in test mode 1.

■ Operations

LINE MUTE will open in the REC mode as for the single deck.

■ Exiting Test Mode 2

Press the ASES key or turn off the power supply.

1.5 PARTS LIST FOR PACKING AND EXPLODED VIEWS

NOTES:

- Parts marked by “NSP” are generally unavailable because they are not in our Master Spare Parts List.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by “ $\odot$ ” are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

1. EXTERIOR AND PACKING

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	MAIN UNIT	RWX1097		41	REGULATOR 1 UNIT	RWZ3026
	2	Lead card 33P	RDD1284	NSP	42	REGULATOR 2 UNIT	RWZ3027
	3	Connector assy 15P	RKP1358		43	LED lens	RAH2383
	4	1 Mechanism unit	RYM1227	NSP	44	LED holder	RNK1810
	5	2 Mechanism unit	RYM1228		45	Door coil spring L	RBH1301
	6	Rubber sheet	AEB1111		46	Door coil spring R	RBH1302
NSP	7	PCB spacer	PNY - 404		47	Eject knob L	REA1128
	8	Foot assy	PXA1201		48	Eject knob R	REA1129
NSP	9	Rubber spacer	REB1077		49	Damper assy	REC1013
NSP	10	spacer	REC1210		50	Center bracket	RNK2050
NSP	11	Main chassis	RNB1094		51	Screw	IBZ30P080FMC
NSP	12	Mechanism shield plate	RNE1503		52	Screw	BBZ30P080FMC
	13	Cord clasper	RNH - 184		53	Screw	BBZ30P080FZK
	14	Half pressure spring	RBK1004		54	Screw	IBZ30P150FCU
	15	Door pocket L	RNK2048		55	Screw	IPZ26P080FMC
	16	Door pocket R	RNK2049		56	Caution card (CT - J320WR/AB only)	RRN1001
	17	Control knob A	RAC1848		57	Pad F	RHA1130
	18	Control knob B	RAC1873		58	Pad R	RHA1131
	19	Slide SW knob	RAC1738		59	Sheet	RHX1006
	20	Front panel	RAH2380		60	Packing case	RHG1535
	21	Connector assy 5P	RKP1682			(CT - J320WR/AEM and AB)	
	22	Door lens	RAH2335		60	Packing case	RHG1537
	23	FL lens	RAH2382			(CT - J320WR/ADL)	
	24	Name plate	PAM1407				
NSP	25	HALF LIGHT 2 UNIT	RWZ3054				
	26	Remain display paper	REE1019				
	27	Connector assy 3P	RKP1683				
NSP	28	Rear panel	RNA1794				
		(CT - J320WR/AEM and ADL)					
NSP	28	Rear panel	RNA1792				
		(CT - J320WR/AB)					
	29	Indicator lens	RNK1591				
	30	Spot lens	RNK1847				
NSP	31	HALF LIGHT 1 UNIT	RWZ3053				
	32	Knob lens	RNK1926				
	33	Door panel L	REA1119				
	34	Door panel R	REA1120				
	35	Azimuth cover L	REA1121				
	36	Azimuth cover R	REA1122				
	37	Bonnet assy	REA1031				
	38	POWER SUPPLY UNIT	RWZ3106				
NSP	39	DISPLAY UNIT	RWZ3107				
NSP	40	OPERATION UNIT	RWZ3108				

2. 1 MECHANISM UNIT AND 2 MECHANISM UNIT

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	ASSY HOLDER HEAD (2 Mechanism unit)	RXA1477	41	BRACKET FW	RNE1438	
	1	ASSY HOLDER HEAD (1 Mechanism unit)	RXA1500	42	SPACER	RNK1822	
	2	FLAME HEAD	RNK1715	43	ASSY MOTOR (2 Mechanism unit)	RXM1063	
	3	LEVER HEAD	RNK1716	43	ASSY MOTOR (1 Mechanism unit)	RXM1062	
	4	SPRING AZIMUTH	RBK1006	44	WIRE	RDD1012	
	5	ASSY ARM ASSIST	RXA1401	45	BELT MAIN (1 Mechanism unit)	REB1159	
	6	GEAR ARM HEAD	RNK1717	45	BELT MAIN (2 Mechanism unit)	REB1162	
	7	SPRING CASSETTE	RBK1039	46	P.C. BOARD	RNP1348	
	8	EJECT LOCK	RNK1718	47	HOUSING (2 Mechanism unit)	RKP1397	
	9	CAP REEL	RNK1719	47	HOUSING (1 Mechanism unit)	RKP1396	
	10	ASSY PINCH ARM L	RXA1403	48	EJECT LEVER L (2 Mechanism unit)	RNK1831	
	11	CHASSIS HEAD	RNE1437	48	EJECT LEVER R (1 Mechanism unit)	RNK1811	
	12	ASSY PINCH ARM R	RXA1404	49	COLLAR	RNK1704	
	13	ARM PLAY L	RNK1866	61	SPRING	RBH1282	
	14	GEAR PLAY	RNK1867	62	SPRING	RBH1283	
	15	ARM PLAY R	RNK1868	63	SPRING	RBH1284	
	16	CHASSIS OS.	RXA1411	64	SPRING	RBH1286	
	17	ASSY SUB REEL L	RXA1407	65	SPRING	RBH1288	
△	18	SOLENOID	RXP1020	66	SPRING	RBH1291	
	19	WIRE	RDC1006	67	SPRING	RBH1285	
	20	ARM RVS	RNK1721	68	SPRING	RBH1287	
	21	GEAR FF	RNK1723	69	SPRING	RBH1289	
	22	ASSY ARM FR	RXA1412	70	SPRING	RBH1290	
	23	ASSY PULLEY FR	RXA1413	71	SPRING	RBH1292	
	24	BELT FR	REB1158	72	SPRING	RBH1061	
	25	METAL	RNG1048	73	SPRING	RBH1325	
	26	ASSY FLYWHEEL L (1 Mechanism unit)	RXA1423	74	SPRING (L) (2 Mechanism unit)	RBH1319	
	26	ASSY FLYWHEEL L (2 Mechanism unit)	RXA1476	74	SPRING (R) (1 Mechanism unit)	RBH1320	
	27	METAL	RNG1005	81	SCREW	RBA1023	
	28	ARM BRAKE	RNK1724	82	SCREW	RBA1027	
	29	ASSY SUB REEL R	RXA1408	83	SCREW	RBA1030	
	30	ARM TRIGGER	RNK1722	84	SCREW	PCZ20P040FMC	
	31	GEAR CAM	RNK1725	85	SCREW	RBA1093	
	32	METAL	RNG1049	86	SCREW	RBA1094	
	33	ASSY FLYWHEEL R (1 Mechanism unit)	RXA1424	87	SCREW	RBA1100	
	33	FLYWHEEL R (2 Mechanism unit)	RXA1415	88	SCREW	RBA1095	
	34	METAL	RNG1004	89			
	35	WIRE (14P) (2 Mechanism unit)	RDD1217	90	GEAR FW R (2 Mechanism unit)	RNK1733	
	35	WIRE (12P) (1 Mechanism unit)	RDD1216	101	COLLAR (2 Mechanism unit)	RNK1905	
	36	HOLDER WIRE	RNK1683	102	WASHER	RBH1046	
	37	P.C. BOARD	RNP1436	103	WASHER	WA26D047D013	
	38	SWITCH MODE	RSN1020				
	39	SWITCH (LEAF)	RSN1019				
	40	HALL IC.	DN6851A				

1.6 PCB PARTS LIST

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560 Ω $\rightarrow$ $56 \times 10^1 \rightarrow 561$ RD1/8PM $\begin{bmatrix} 5 & 6 & 1 \end{bmatrix}$ J
 47k Ω $\rightarrow$ $47 \times 10^3 \rightarrow 473$ RD1/4PS $\begin{bmatrix} 4 & 7 & 3 \end{bmatrix}$ J
 0.5 Ω $\rightarrow$ 0R5 RN2H $\begin{bmatrix} 0 & R & 5 \end{bmatrix}$ K
 1 Ω $\rightarrow$ 010 RS1P $\begin{bmatrix} 0 & 1 & 0 \end{bmatrix}$ K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω $\rightarrow$ $562 \times 10^1 \rightarrow 5621$ RN1/4PC $\begin{bmatrix} 5 & 6 & 2 & 1 \end{bmatrix}$ F

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
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LIST OF ASSEMBLIES

	MAIN UNIT	RWX1097
NSP	SUB UNIT	RWM1667
NSP	—REGULATOR 1 UNIT	RWZ3026
NSP	—REGULATOR 2 UNIT	RWZ3027
NSP	—HALF LIGHT 1 UNIT	RWZ3053
NSP	—HALF LIGHT 2 UNIT	RWZ3054
NSP	—POWER SUPPLY UNIT	RWZ3106
NSP	—DISPLAY UNIT	RWZ3107
NSP	—OPERATION UNIT	RWZ3108

MAIN UNIT

SEMICONDUCTORS

IC101	CXA1115BP
IC201	HA12155NT
IC203	BA10393F
IC204	NJM4558M
IC1011, IC1012	ICP-N75
IC902	PD3263A
Q256, Q802, Q852, Q945, Q946	2SA1309A
Q404, Q804, Q854	2SB1238X
Q401-Q403	2SC1815
Q109, Q110, Q406, Q949	2SC3311A
Q807, Q857	2SD1858X
Q221, Q222, Q257, Q258	2SD2144S
Q107, Q108	2SK373
Q115, Q223	XDA114ES
Q103-Q106, Q215, Q216	XDC114ES
Q941-Q944	XDC114ES
Q101, Q102, Q111-Q114, Q116	XDC124ES
Q803, Q805, Q853, Q855	XDC124ES
Q981, Q982	XDC124ES
D801, D851	11ES2
D101-D104, D109-D112, D201	1SS254
D262, D269, D270, D272, D273	1SS254
D401, D405, D802, D803	1SS254
D806, D807, D852-D857, D931	1SS254
D933, D934	1SS254

COILS AND FILTERS

L402	LFA121K
L401	RTD1068
L101, L102 (5.6MH)	RTF1099
L201, L202 (10MH)	RTF1102
F201, F202	RTF1208

CAPACITORS

C257, C258	CCCSL101J50
C451, C452	CCCSL101K500
C131, C132	CCSQCH100D50
C952	CCSQCH220J50
C113-C116, C261, C262	CCSQL101J50

C111, C112	CEANL101M10
C223, C224, C259, C260	CEAS010M50
C267, C268	CEAS010M50
C209, C210, C935	CEAS100M50
C201, C202	CEAS101M16

C225, C226	CEAS2R2M50
C221, C222, C408, C409	CEAS330M16
C129, C130, C263, C264, C902	CEAS470M16
C119, C120, C227-C230	CEAS4R7M50
C133, C247, C248	CEASR10M50

C203, C204, C207, C208	CEASR47M50
C241, C242	CEASR47M50
C271, C272	CFTXA103J50
C217-C220	CFTXA104J50
C404	CFTXA183J50

C211-C216	CFTXA222J50
C121, C122, C249, C250	CFTXA223J50
C406, C407	CFTXA332J50
C405	CFTXA472J50
C117, C118	CFTXA822J50

C105, C106, C931-C934	CKSQYB102K50
C236, C237, C243, C244	CKSQYB221K50
C125, C126	CKSQYB391K50
C101, C102, C123, C124, C235	CKSQYB471K50
C103, C104	CKSQYB561K50

C127, C128, C802, C852	CKSQYB681K50
C134, C903	CKSQYF103Z50

Mark	No.	Description	Part No.
	C801, C901		CKSQYF473Z50
	C403		CQPA682J100
RESISTORS			
	R920		RA4T223J
	R401		RD1/2LF010J
	R414		RD1/2VM100J
	R408		RD1/2VM161J
	R409		RD1/2VM560J
	R404		RD1/2VM5R6J
	R950		RD1/6PM271J
	R333, R334		RD1/6PM392J
	R980-R983		RD1/6PM471J
	R932		RD1/6PM561J
	VR851 (4.7K)		RCP1020
	VR802, VR852 (10K)		RCP1045
	VR101-VR104, VR201, VR202 (22K)		RCP1046
	VR401, VR402 (100K)		RCP1048
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN930 CONNECTOR		52004-1510
	CN902 33P CONNECTOR		52045-3345
	CN1002 15P JUMPER CONNECTOR		52147-1510
	CN801 12P JUMPER CONNECTOR		52328-1220
	CN851 14P JUMPER CONNECTOR		52328-1420
	CN103 2P TOP POST		B2B-EH
	CN905, CN906 KR CONNECTOR POST		B2B-PH-K
	CN102 3P TOP POST		B3B-EH
	CN101 3P TOP POST		B3B-EH-R
	PCB BINDER		VEF1008
	X901 CERAMIC RESONATOR (4.19MHz)		VSS1014
REGULATOR 1 UNIT			
SEMICONDUCTORS			
△	IC1003		NJM7805FA
REGULATOR 2 UNIT			
SEMICONDUCTORS			
△	IC1004		NJM7812FA
HALF LIGHT 1 UNIT			
SEMICONDUCTORS			
	D3001-D3004		SEL6410E
HALF LIGHT 2 UNIT			
SEMICONDUCTORS			
	D3501-D3504		SEL6410E
POWER SUPPLY UNIT			
SEMICONDUCTORS			
△	IC1006		NJM7806FA
△	IC1002		NJM7906FA
	Q1004		DTC124TS
△	D1015, D1016		1SS254
△	D1013		S2VB20

Mark	No.	Description	Part No.
CAPACITORS			
	C1008		CEAS102M25
	C1007, C1009, C1011, C1015		CEAS221M16
	C1004, C1005		CEAS222M25
	C1023		CEAS4R7M50
	C1016		CKCYF473Z50
RESISTORS			
	All Resistors		RD1/6PM□□□J
OTHERS			
	HEAT SINK		ANH-575
	EARTH METAL FITT		VNF-091
DISPLAY UNIT			
SEMICONDUCTORS			
	D2001, D2002, D2006, D2007		1SS254
	D2009-D2011		1SS254
	D2019, D2020		SEL6910A
	D2012, D2021-D2023		SEL6C10R
SWITCHES AND RELAYS			
	S2003, S2004, S2007, S2008		RSG1033
	S2024, S2025		RSH1041
RESISTORS			
	All Resistors		RD1/6PM□□□J
OTHERS			
	CN9020 33P FFC CONNECTOR		52045-3345
OPERATION UNIT			
SEMICONDUCTORS			
	D2004, D2005		1SS254
	D2016, D2017		SEL6410E
	D2013, D2014		SEL6910A
SWITCHES AND RELAYS			
	S2018, S2019, S2022, S2023		RSG1033
	S2013-S2015		RSG1034
RESISTORS			
	All Resistors		RD1/6PM□□□J

Service Manual

ORDER NO.
RRZ1036

STEREO DOUBLE CASSETTE TAPE DECK

CT-J320WR

CHAPTER 2

- 2.1 PACKING AND EXPLODED VIEWS 2-3
- 2.2 PCB CONNECTION DIAGRAM..... 2-7
- 2.3 SCHEMATIC DIAGRAM..... 2-13

PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan

PIONEER ELECTRONICS SERVICE INC. P.O. Box 1760, Long Beach, California 90801 U.S.A.

PIONEER ELECTRONICS OF CANADA, INC. 300 Allstate Parkway Markham, Ontario L3R 0P2 Canada

PIONEER ELECTRONIC [EUROPE] N.V. Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium

PIONEER ELECTRONICS AUSTRALIA PTY. LTD. 178-184 Boundary Road, Braeside, Victoria 3195, Australia TEL: [03] 580-9911

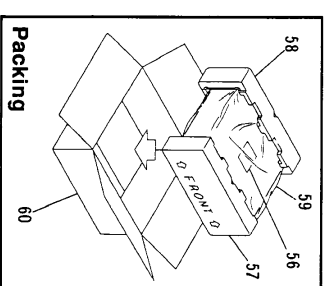
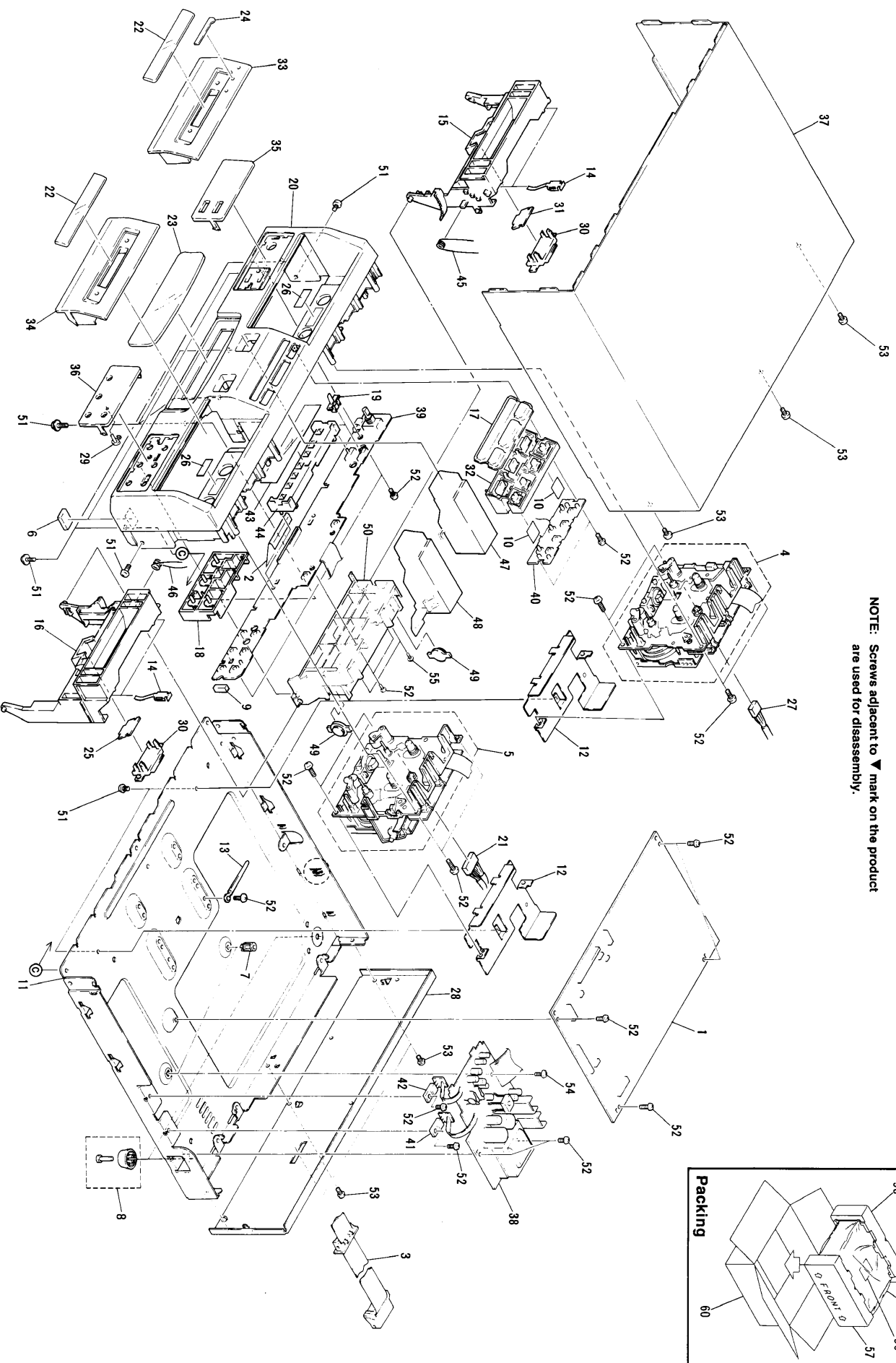
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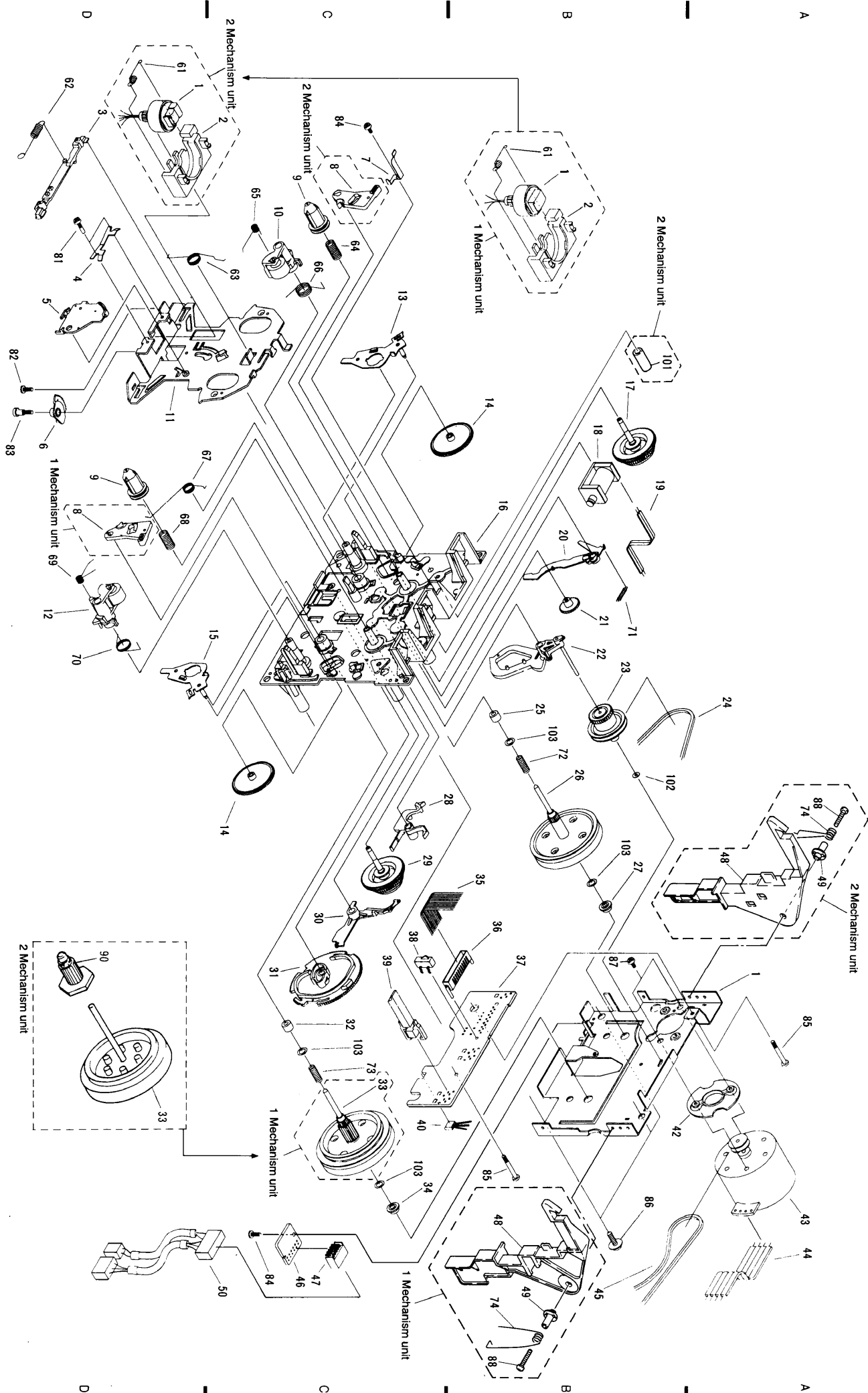
2.1 PACKING AND EXPLODED VIEWS

1. EXTERIOR AND PACKING

NOTE: Screws adjacent to ▼ mark on the product are used for disassembly.

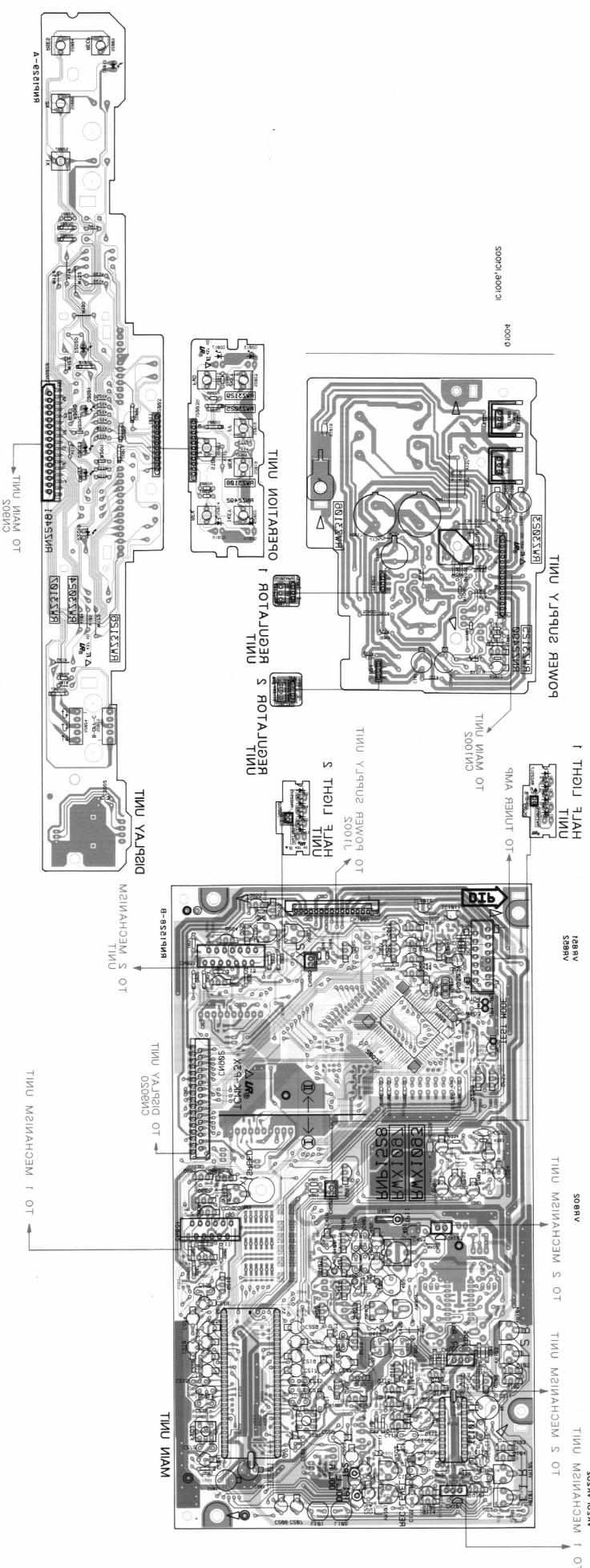


2. 1 MECHANISM UNIT AND 2 MECHANISM UNIT

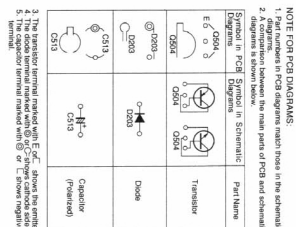


2.2 PCB CONNECTION DIAGRAM

- This diagram is viewed from the gray colored foil side.
- This PCB is double sided.



- This diagram is viewed from the pink colored foil side
- This PCB is double sided.



2.3 SCHEMATIC DIAGRAM

